



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D3910-3
Job Sheet 213379



Part No: D3910-3

Job Qty: 40 pcs

Part Name: Crosstube Lug



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 9/24/20

Job Tracking No:

Due Date: 10/5/20

Created By: Patrick Lussier

Type: Stock

Description:

Note: DWG REV E SHEETS 1,3 IPP REV:A NEW ISSUE 09-11-25 JLM VERIFIED BY:DD IPP REV:B AS PER REV B 10-03-23 JLM VERIFIED BY:DD IPP REV:C 18.02.02 REMOVE FINISH DD VERF:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard		Workcenter/Supplier		Sign-off
					Setup Hrs	Run Hrs	Workcenter / Supplier	Lead Time	
110	Purchasing	40 pcs		10/3/20	0.00	0.00	Purchasing - 1	5	SEP 25 2020
							Purchasing - 2	5	
							Purchasing - 3	5	
120	Packaging 2-1 - Receive - B4B	40 pcs		10/3/20	0.00	0.00	Packaging 2 - 1 - B4B		SEP 25 2020
							Packaging 2 - 2 - B4B		
							Packaging 2 - 3 - B4B		
							Packaging 2 - 5 - B4B		
							Packaging 2 - 4 - B4B		
							Packaging 2 - 6 - B4B		
							Packaging 2 - 7 - B4B		
							Packaging 2 - 8 - B4B		
							Packaging 2 - 9 - B4B		
							Packaging 2 - 10 - B4B		
							Packaging 2 - 11 - B4B		
							Packaging 2 - 12 - B4B		
							Packaging 2 - 13 - B4B		
							Packaging 2 - 14 - B4B		
							Packaging 2 - 15 - B4B		
							Packaging 2 - 16 - B4B		
							Packaging 2 - 17 - B4B		
							Packaging 2 - 18 - B4B		
							Packaging 2 - 19 - B4B		
							Packaging 2 - 20 - B4B		
							Packaging 2 - 21 - B4B		
							Packaging 2 - 22 - B4B		
							Packaging 2 - 23 - B4B		
							Packaging 2 - 24 - B4B		
							Packaging 2 - 25 - B4B		
							Packaging 2 - 26 - B4B		
							Packaging 2 - 27 - B4B		



Container No: S303106



Part: D3910-3

Job No: 213379

Serial No/Batch: S303106

Revision:

Inspector:

Exp Date:

Instructions: Various STC's

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
CANADA
TEL: 1 613 632-5200
Email: sales@dartaero.com
www.dartaerospace.com

Date: 09/25/20

Plex 9/24/20 1:04 PM dart.lussier.patrick

				Packaging 2 - 28 - B4B	
				Packaging 2 - 29 - B4B	
				Packaging 2 - 30 - B4B	
				Packaging 2 - 31 - B4B	
				Packaging 2 - 32 - B4B	
				Packaging 2 - 33 - B4B	
				Packaging 2 - 34 - B4B	
				Packaging 2 - 35 - B4B	
				Packaging 2 - 36 - B4B	
				Packaging 2 - 37 - B4B	
130 QC 6	40 pcs	10/3/20	0.00 0.00	QC 6 - 9	
				QC 6 - 68	
				QC 6 - 61	
				QC 6 - 40	
				QC 6 - 81	
				QC 6 - 82	
135 Handfinish - 1-1 Chemical-B4B	40 pcs	10/3/20	0.00 2.67	Handfinish - 1 - 1 - B4B	
				Handfinish - 1 - 2 - B4B	
				Handfinish - 1 - 3 - B4B	
				Handfinish - 1 - 4 - B4B	
				Handfinish - 1 - 5 - B4B	
				Handfinish - 1 - 6 - B4B	
				Handfinish - 1 - 7 - B4B	
				Handfinish - 1 - 8 - B4B	
				Handfinish - 1 - 9 - B4B	
				Handfinish - 1 - 10 - B4B	
				Handfinish - 1 - 11 - B4B	
				Handfinish - 1 - 12 - B4B	
				Handfinish - 1 - 13 - B4B	
				Handfinish - 1 - 14 - B4B	
				Handfinish - 1 - 15 - B4B	
				Handfinish - 1 - 16 - B4B	
				Handfinish - 1 - 17 - B4B	
				Handfinish - 1 - 18 - B4B	
				Handfinish - 1 - 19 - B4B	
				Handfinish - 1 - 20 - B4B	
				Handfinish - 1 - 21 - B4B	
				Handfinish - 1 - 22 - B4B	
				Handfinish 1 - SCH-B	
138 QC 7	40 pcs	10/3/20	0.00 0.00	QC 7 - 10	
				QC 7 - 13	

DAS
40
9-89

SEP 30 2020

2020/10/07

				QC 7 - 14	
				QC 7 - 15	
				QC 7 - 17	
				QC 7 - 18	
				QC 7 - 19	
				QC 7 - 2	
				QC 7 - 28	
				QC 7 - 3	
				QC 7 - 30	
				QC 7 - 34	20-10-8
				QC 7 - 36	
				QC 7 - 37	
				QC 7 - 41	
				QC 7 - 47	
				QC 7 - 48	
				QC 7 - 51	
				QC 7 - 58	
				QC 7 - 59	
				QC 7 - 60	
				QC 7 - 9	
				QC 7 - 68	
				QC 7 - 50	
				QC 7 - 67	
				QC 7 - 40	
				QC 7 - 24	
				QC 7 - 43	
				QC 7 - 61	
				QC 7 - 81	
				QC 7 - 76	
				QC 7 - 79	
				QC 7 - 83	
				QC 7 - 82	
				QC 7 - 87	
				QC 7 - SCH-B	
160 Powdercoat - 1 White Gl(A)- B4B <i>MASHA</i> <i>START: 9:10</i> <i>CVT: 300°</i> <i>FINISH: 9:40</i>	40 pcs	10/5/20	0.00 1.33	Powdercoat - 1 - B4B	
				Powdercoat - 2 - B4B	
				Powdercoat - 3 - B4B	20-10-8
				Powdercoat - 4 - B4B	
				Powdercoat - 5 - B4B	
				Powdercoat - 6 - B4B	
				Powdercoat - 7 - B4B	
				Powdercoat - 8 - B4B	
				Powdercoat - 9 - B4B	
				Powdercoat - 10 - B4B	
				Powdercoat - SCH-B	
170 QC 3	40 pcs	10/5/20	0.00 0.00	QC 3 - 10	
				QC 3 - 13	
				QC 3 - 15	
				QC 3 - 17	
				QC 3 - 18	
				QC 3 - 2	
				QC 3 - 28	
				QC 3 - 3	
				QC 3 - 30	
				QC 3 - 34	
				QC 3 - 36	
				QC 3 - 41	
				QC 3 - 51	
				QC 3 - 58	

					QC 3 - 59	
					QC 3 - 68	
					QC 3 - 9	
					QC 3 - 40	
					QC 3 - 19	
					QC 3 - 43	
					QC 3 - 24	
					QC 3 - 61	DAS
					QC 3 - 81	82
					QC 3 - 82	9-89
					QC 3 - 87	OCT 08 2020
					QC 3 - 47	
					QC 3 - SCH-B	
180	Packaging 3-1 - Stock - B4B	40 pcs	10/5/20	0.00 0.00	Packaging 3 - 1 - B4B	
					Packaging 3 - 2 - B4B	
					Packaging 3 - 3 - B4B	DAS
					Packaging 3 - 4 - B4B	28
					Packaging 3 - 5 - B4B	9-89
					Packaging 3 - 6 - B4B	
					Packaging 3 - 7 - B4B	OCT 08 2020
					Packaging 3 - 8 - B4B	
					Packaging 3 - 9 - B4B	
					Packaging 3 - 10 - B4B	
					Packaging 3 - 11 - B4B	
					Packaging 3 - 12 - B4B	
					Packaging 3 - 13 - B4B	
					Packaging 3 - 14 - B4B	
					Packaging 3 - 15 - B4B	
					Packaging 3 - 16 - B4B	
					Packaging 3 - 17 - B4B	
					Packaging 3 - 18 - B4B	
					Packaging 3 - 19 - B4B	
					Packaging 3 - 20 - B4B	
					Packaging 3 - 21 - B4B	
					Packaging 3 - 22 - B4B	
					Packaging 3 - 23 - B4B	
					Packaging 3 - 24 - B4B	
					Packaging 3 - 25 - B4B	
					Packaging 3 - 26 - B4B	
					Packaging 3 - 27 - B4B	
					Packaging 3 - 28 - B4B	
					Packaging 3 - 29 - B4B	
					Packaging 3 - 30 - B4B	
					Packaging 3 - 31 - B4B	
					Packaging 3 - 32 - B4B	
					Packaging 3 - 33 - B4B	
					Packaging 3 - 34 - B4B	
					Packaging 3 - 35 - B4B	
					Packaging 3 - 36 - B4B	
					Packaging 3 - 37 - B4B	
190	QC 21 - SA	40 pcs	10/5/20	0.00 0.00	QC 21 - SA - 21	DAS
					QC 21 - SA - 70	28
					QC 21 - SA - 9	9-89
					QC 21 - SA - 77	OCT 08 2020
					QC 21 - SA - 28	
Part Op 110 - (Purchasing) ISSUE PO TO METEC, MANUFACTURE AS PER DWG C OF C IS REQUIRED						
Descriptions: 120 - (Receive & Inspect for Damage & Mat'l Certs) Ensure C of C is attach						
130 - (QC6- All purchased or subcontracted products)						
135 - Chemical Conversion Coat per QSI005 4.1						
138 - QC7-Inspect Chemical Conversion Coat						
POHB 047187 x40						

160 - START TIME: _____ OVEN TEMPERATURE: _____ FINISH TIME: _____
 170 - QC3- Inspect Part Finish Standard Process
 180 - (Identify as per dwg & Stock Location: _____)
 190 - (QC21- Final Inspection - Work Order Release)

Job BOM

Part / Item	Component Name	Quantity	Operation	Container
D2423	Lug Extrusion	5 ft (.125 ea)	110-Purchasing	
D3910-3P	Crosstube Lug	40 pcs (1 ea)	110-Purchasing	8303104

Job Allocations

Operation	Component Part	Required	Inventory	Allocated
110-Purchasing	D2423	5	478	0
	D3910-3P	40	0	0

Part Specifications

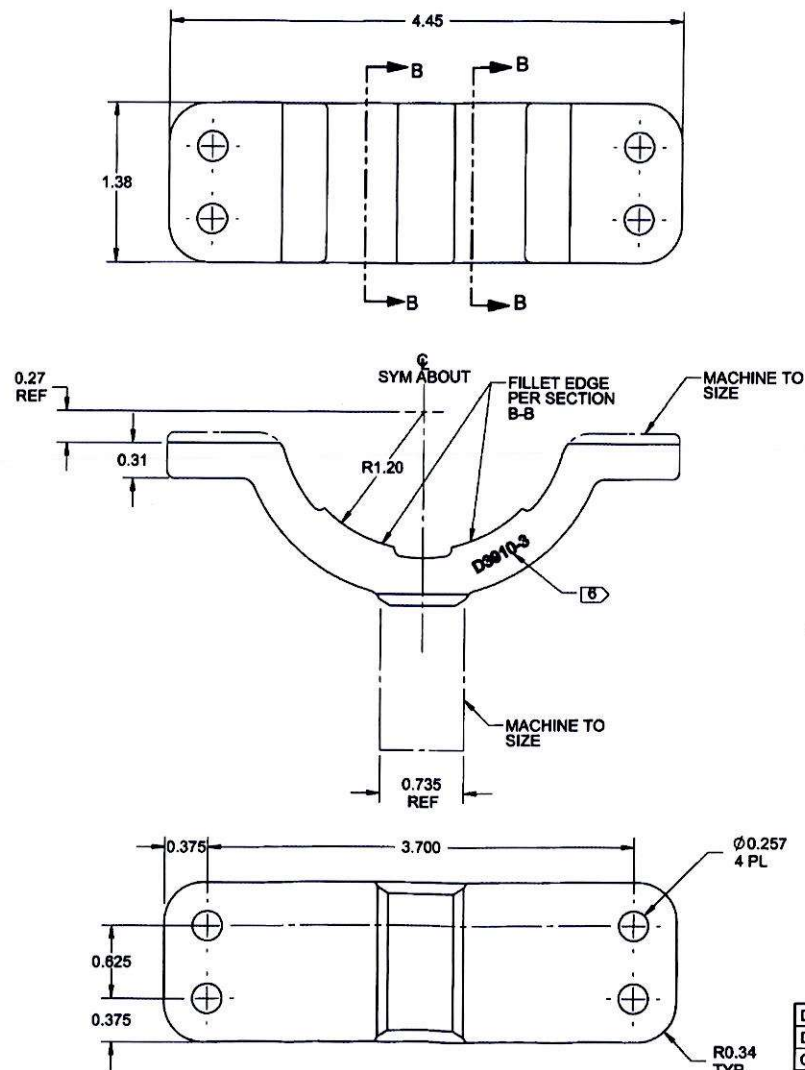
Spec No	Description	Target/Tolerance	Limits	Type	Special Comments
1	Crosstube Lug	4.450Inches $\pm$ 0.030	4.480 4.420		
2	Crosstube Lug	1.380Inches $\pm$ 0.030	1.410 1.350		
3	Crosstube Lug	0.080Inches $\pm$ 0.020	0.100 0.060	Radius	
4	Crosstube Lug	0.270Inches $\pm$ 0.030	0.300 0.240	reference	
5	Crosstube Lug	0.310Inches $\pm$ 0.030	0.340 0.280		
6	Crosstube Lug	0.735Inches $\pm$ 0.010	0.745 0.725	reference	
7	Crosstube Lug	1.200Inches $\pm$ 0.030	1.230 1.170	Radius	
8	Crosstube Lug	3.700Inches $\pm$ 0.010	3.710 3.690		
9	Crosstube Lug	0.375Inches $\pm$ 0.010	0.385 0.365		
10	Crosstube Lug	0.625Inches $\pm$ 0.010	0.635 0.615		
11	Crosstube Lug	0.375Inches $\pm$ 0.010	0.385 0.365		
12	Crosstube Lug	0.340Inches $\pm$ 0.030	0.370 0.310	Radius	
13	Crosstube Lug	0.257Inches + 0.006 - 0.001	0.263 0.256	Diameter	
14	Crosstube Lug	0.100Inches $\pm$ 0.010	0.110 0.090		
15	Crosstube Lug	45.000Degrees $\pm$ 0.500	45.500 44.500	angle	
16	Crosstube Lug	1.410Inches $\pm$ 0.030	1.440 1.380	Reference	

Plex 9/24/20 1:04 PM dart.lussier.patrick

SECTION B-B

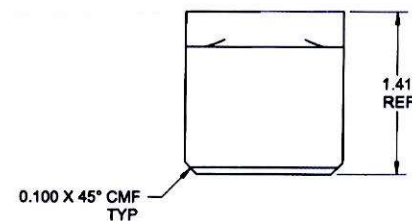


ROUND EDGE
R0.08 MIN - 0.10 MAX
2 PL



D3910-3 X-TUBE LUG

SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 213335 M15
20-09-28



RELEASED
2014 JUN 05

DESIGN	AJS	DART AEROSPACE LTD	
DRAWN	AJS	HAWKESBURY, ONTARIO, CANADA	
CHECKED	J	DRAWING NO.	REV. E
MFG. APPR.	J	D3910	SHEET 3 OF 5
APPROVED	J	TITLE	SCALE
DE APPR.	J	X-TUBE LUG (350)	NTS
DATE	14.05.16	COPYRIGHT © 2010 BY DART AEROSPACE LTD	
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Entered: _____ Date: _____



WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

NCR No. _____

Route update only ☐

Job: _____ Part No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐	DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Eng. (Non-AW) ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Engineering ☐ Water Jet ☐ Supplier ☐ Quality ☐			
Date :	Sequence #:	QTY Affected :		MRB (QSI042)	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor	
				QC / QA Coordinator	
Root Cause Operator ☐ Manufacturing Process ☐ Equip/Tooling ☐ Handling/Presservation ☐ Material ☐ Product Improvement ☐ Process Improvement ☐ Human Factors ☐		FAULT CATEGORY ☐ Pressure/Forced ☐ Bending ☐ Crushing ☐ Cracks ☐ Crimp/Kink/Ripple/Wave/Twist ☐ Marks/Chatter ☐ Mislabeled ☐ Contamination ☐ Misaligned/off center ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Incomplete/Unclear Instructions ☐ Drill Holes ☐ Fit/Function ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain Direction ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set/Set-up ☐ Positioned Wrong ☐ Outside Tolerance ☐ Drawing ☐ Finish ☐ Part Lost/Missing ☐ Misread			
Other/Details:					



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER POHB047187



Supplier: MEM001-VC
Metec Metal Technology Inc.
20 Terry Fox Drive PO Box 781
Vankleek Hill
ON
K0B 1R0 Canada
Phone: 613 678 3957
Fax: 613 678 3956

Attention: Walz, Shigi

Ship To: 1270 Aberdeen Street
Hawkesbury
ON
K6A 1K7 Canada
Phone: 613-632-5200

PO No: POHB047187

PO Date: 9/24/20

Due Date: 10/5/20

Purchase Order

Revision:

Revision Date:

Issued By: Lussier, Patrick
Phone: 613-632-5200 Ext: 276
plussier@dartaero.com

Via: Ground

Pymt Terms: Net 60

Freight Terms:

Special Comments:

Items														
Line Item	Job	Part	Drawing	Supplier Part No	Item No	Description	Status	Account	Due Date	Order Quantity	Received Quantity	Balance	Unit Price (CAD)	Extended Price
1	213341	D4091-1P	D4091 Rev.A			Lug : Various STC's As Per Dwg D4091 Rev. A Alodine and Paint as Per QSI 005	Firmed X38	-	10/5/20	38 pcs	0 pcs	38 pcs	\$21.00/pcs	\$798.00
SEP 25 2020														
Line Item Note Painted														
2	213334	D3910-1P	D3910 REV.E			Crosstube Lug : Various STC's As Per Dwg D3910 Rev. E Alodine and Paint as pe QSI 005	Firmed X64	-	10/5/20	64 pcs	0 pcs	64 pcs	\$21.00/pcs	\$1,344.00
SEP 25 2020														
Line Item Note Painted														
3	213379	D3910-3P	D3910			Crosstube Lug : Various STC's As Per Dwg D3910 Rev. E Alodine and Paint as Per QSI 005	Firmed X40	-	10/5/20	40 pcs	0 pcs	40 pcs	\$15.75/pcs	\$630.00
SEP 25 2020														
Line Item Note UNPAINTED														
Grand Total:													\$2,772.00	



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200

PURCHASE ORDER POHB047187



Order Notes

Terms & Condition of Purchasing(Suppliers) and Procurement Quality Clauses are an integral part of our AS9100 requirements. To learn in detail, please visit www.dartaerospace.com for further explanation.

Procurement Quality Clauses

A005 RIGHT OF ENTRY

A007 FIRST ARTICLE INSPECTION (FAI) BY SELLER, (DOCUMENTATION MAINTAINED BY SUPPLIER)

A012 CHEMICAL AND PHYSICAL TEST REPORTS

A016 PERSONNEL QUALIFICATION

A017 RAW MATERIAL IDENTIFICATION (AS APPLICABLE)

A026 CERTIFICATION OF MATERIAL CONFORMANCE

A041 QUALITY MANAGEMENT SYSTEM

A042 DART NOTIFICATION BY SUPPLIER

A043 RETENTION OF QUALITY DOCUMENT

A048 COUNTERFEIT PARTS AVOIDANCE, DETECTION, MITIGATION AND DISPOSITION PROGRAM

A049 SUPPLIER AWARENESS

Please ensure to send the related invoice to hby_ap@dartaero.com.

Plex 9/24/20 3:57 PM dart.lussier.patrick



20 Terry Fox Drive, Vankleek Hill, Ontario K0B 1R0

Tel. (613) 678-3957 & (613) 678-2782 Fax (613) 678-3956 metec@metec.ca

CERTIFICATE OF CONFORMITY

SOLD TO:

Dart Aerospace Ltd.
1270 Aberdeen Street
Hawkesbury, Ont.
K6A 1K7

SHIPPED TO:

same

Quantity	Part Number	Part Name	Dwg Rev.#	Material Batch #	Paint Batch #	P.O. Number
38	DART-D4091-1P	Lug alodined and painted as per QSI 005	A	S187667	919775	HB047187
60	DART-D3910-1P	Crosstube Lug, alodined and painted as per QSI 005	E	S187667	021708-1	HB047187
4	DART-D3910-1P	Crosstube Lug, alodined and painted as per QSI 005	E	S187667	919398	HB047187
40	DART-D3910-3P- UNPAINTED	Crosstube Lug	E	S187667	-	HB047187

MATERIAL: supplied by DART

We hereby certify that the above parts were made in conformance with applicable drawings.

DAS
40
8-89

METEC Metal Technology Inc.

Heather Nixon

Heather Nixon

Vankleek Hill, September 25, 2020



www.metec.ca | 20 Terry Fox Drive, Vankleek Hill, Ontario, Canada K0B 1R0 | Phone: +1 613-678-3957 Fax: +1 613-678-3956

Packing List

Bill Dart Aerospace Ltd.

To: 1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Canada

Ship Dart Aerospace Ltd.

To: 1270 Aberdeen Street
Hawkesbury, ON K6A 1K7
Canada

Shipment No: 27992

Shipment Date: 09/25/2020

Ship Via: Pick up at METEC

Order Number: 5117

Order Date: 2020-09-25

Customer Code: DART

Phone: (613) 632-9577

PO Number: POHB047187

Terms: Net 60 Days

----- Quantity -----								
<u>Item</u>	<u>Open</u>	<u>Shipped</u>	<u>Back Ord</u>	<u>Canceled</u>	<u>Unit</u>	<u>Description</u>	<u>Revision</u>	<u>Job Number</u>
1	38	38	0	0	EA	DART-D4091-1P Lug alodined and painted as per QSI 005	A	5117-01
2	64	64	0	0	EA	DART-D3910-1P Crosstube Lug, alodined and painted as per QSI 005	E	5117-02
3	40	40	0	0	EA	DART-D3910-3P-UNPAINTED Crosstube Lug	E	5117-03

RECEIVED

SEP 25 2020

DART AEROSPACE LTD.

Packing Clerk's Signature
Metec Metal Technology Inc

Received In Good Order By
Dart Aerospace Ltd.